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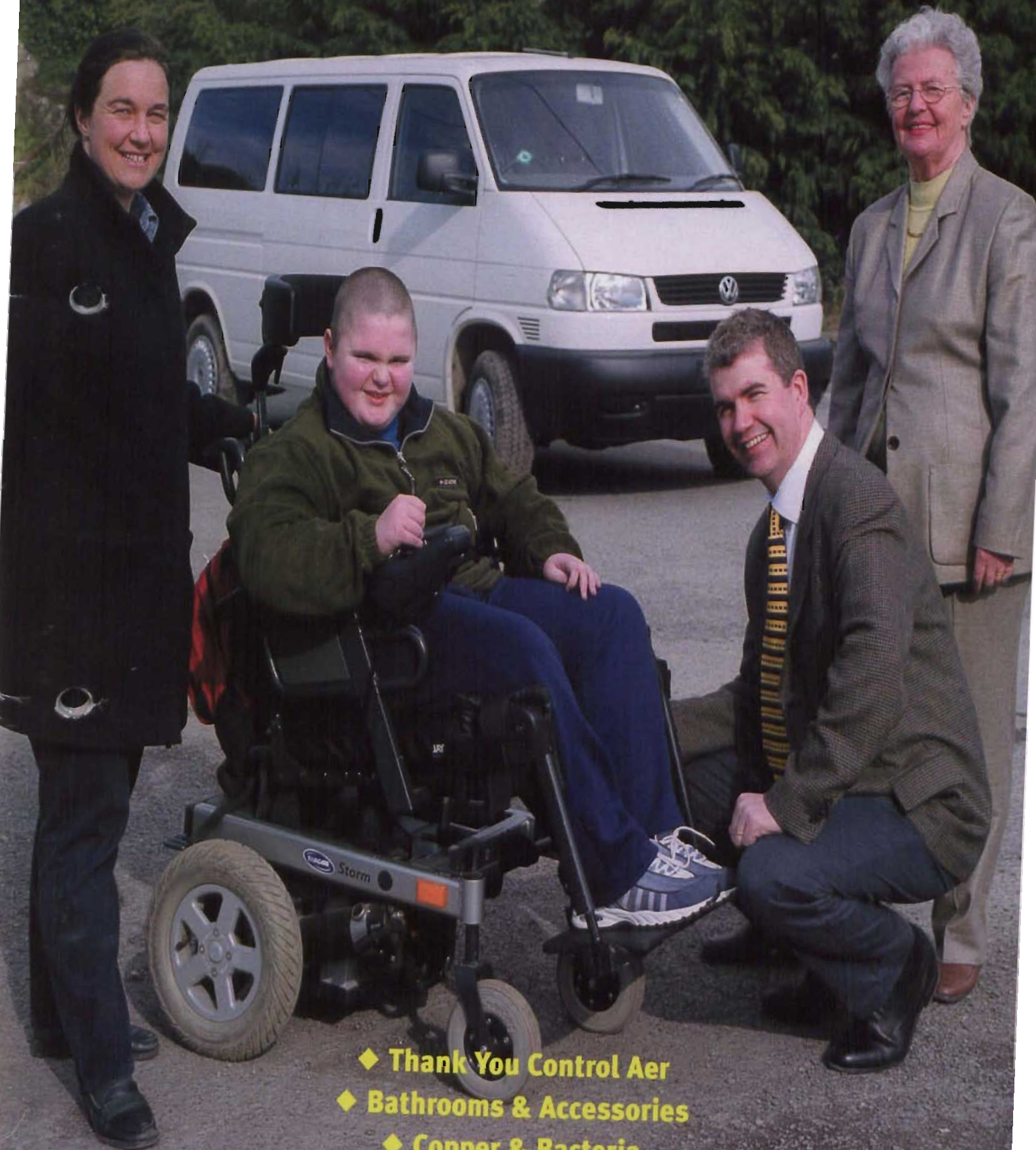
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BSN News

et al.: BS News

MECHANICAL & ELECTRICAL BUILDING SERVICES

APRIL 2001



- ◆ Thank You Control Aer
- ◆ Bathrooms & Accessories
- ◆ Copper & Bacteria
- ◆ Storage Tanks

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BSNews*

MECHANICAL & ELECTRICAL
BUILDING SERVICES

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Readership Data

Irish Building Services News (formerly Irish H&V News) is Ireland's only Building Services magazine providing coverage of heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing, maintenance and environmental industries. It is the only publication catering exclusively for these industries and its circulation includes members of the following: Chartered Institution of Building Services Engineers (CIBSE);

The Mechanical Engineering & Building Services Contractors'

Association (MEBSA); The Association of Consulting Engineers of Ireland (ACEI); The Mechanical Engineering Contractors' Association; The Institute of Domestic Heating Engineers (IDHE);

The Registered Heating Contractors Association; The Maintenance, Energy & Environmental Technology Association (MEETA) which incorporates energy managers and maintenance managers;

The Energy Conservation & District Heating Association; The Institute of Plumbing;

The Irish Home Builders Association (IHBA); Builders Merchants/Trade Supply Outlets; Irish Property & Facilities Managers Association.

In addition, Irish Building Services News circulates to independent building services contractors and key executives in industry. Government, Semi-State and local authority bodies. Essentially, our circulation is virtually saturation coverage of all those with an interest and/or involvement in the industry.

Apprenticeships Being Downgraded?

"A recent decision by Fás to reduce the number of weekly attendance hours for all apprentices on Apprentice Training Programmes at Fás Training Centres is a big mistake and will add to the serious skills shortage that already exists in the construction industry", according to Peter McCabe, Director of Manpower Services of the Construction Industry Federation.

Reflecting both continued economic growth and the implementation of the NDP, employment in the industry is forecast to grow by 30% or 44,000 people by 2003, while output is expected to grow by 28% or £3.4 billion over the same period. Naturally, this growth is putting severe pressure on employers to find skilled workers to fill available positions.

"The construction industry has responded to the pressure", says Mr McCabe. "Apprenticeship intake has risen from 2,400 in 1993/94 to over 6,000 in 1999/2000. There are now more than 18,000 apprentices in training in the construction industry. However, the apprenticeship scheme has experienced backlogs. Estimates are for a backlog of 2,500 apprentices currently awaiting off-site training places. Agreements by some Institutes of Technology to provide a summer term aimed at final phase training is helping, as is the agreement by the ESB to provide 600 training places for electrical apprentices.

"Yet, in the midst of all this good work, Fás, the National Training Agency, has decided — without consultation — to reduce the number of apprenticeship training hours per week. To clear the apprenticeship backlog, and to meet the current skills shortages in the industry, Fás should be upgrading the service, not downgrading it. As a matter of urgency Fás should:-

"Increase the number of training hours per week for apprentices;

"Operate a more flexible approach whereby Fás Training Centres and tutors would be available Friday afternoons, in the evenings, and weekends;

"Apprentices should be offered short intensive training programs aimed at alleviating the immediate problems in the industry;

"Fás should provide a new scheme to facilitate older and experienced general operatives who wish to achieve a trade qualification".

IN THIS ISSUE

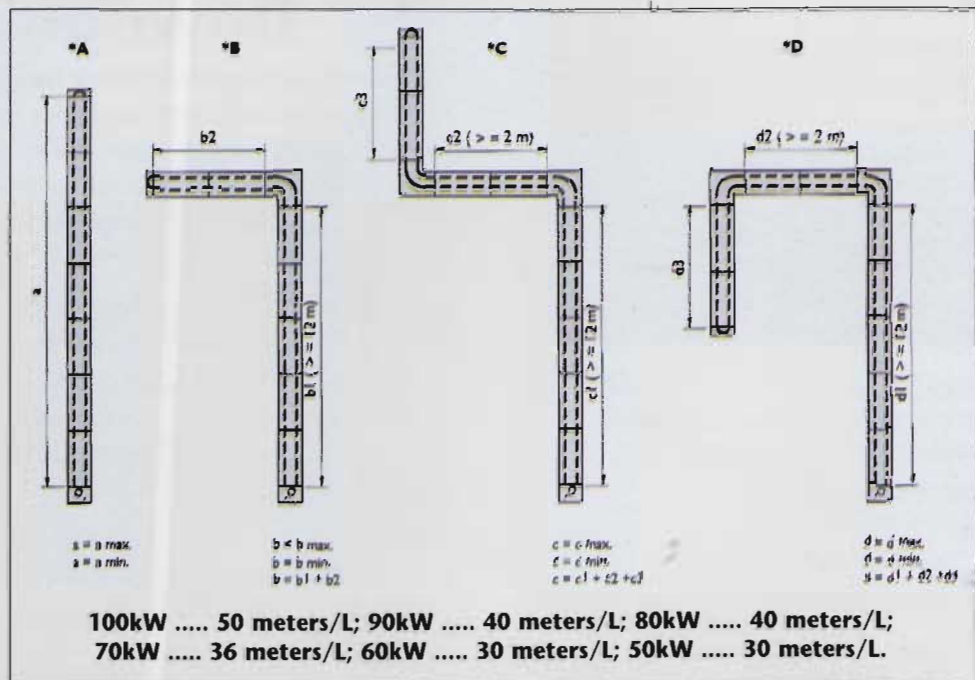
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TRADE NEWS

Mark Infra Line ... Pure Comfort

Mark Infra Line is a suspended flexible form of radiant heating. The gas-fired radiant tube heater — which is energy efficient, reliable, and offers value for money — is easy to install, is quiet in operation, and provides a total even heat throughout a building.

This form of heat is ideal for community halls, school assembly areas, and gymnasium.

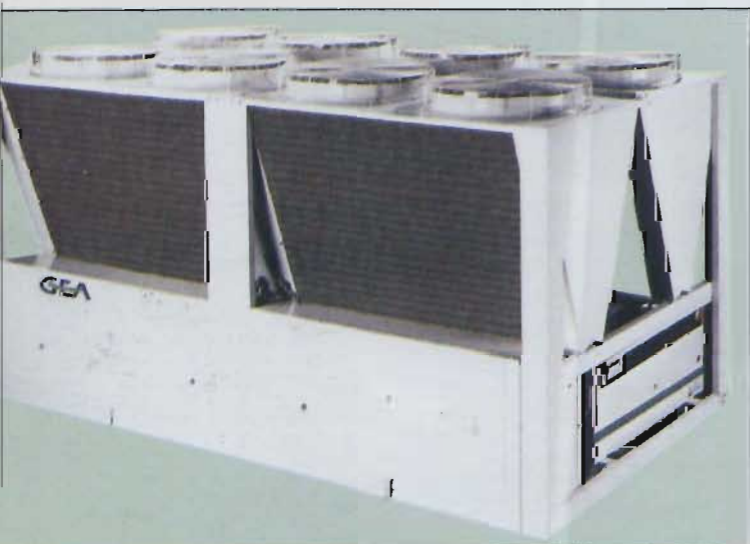


If required, models are available painted and come in a range of colours — red, yellow, green, grey, brown, beigewhite, blue, orange, and beige.

There are four permutations when utilising the Mark Infra Line and these are detailed in the schematic above.

Contact: Mark Eire.
Roger Bolger,
Tel: 087 259 2099;
Michael Keane.
Tel: 087 252 8325

Chillers from GEA Happel



With the introduction of a new range of air-cooled and water-cooled chillers by GEA Happel Ltd, H&M Engineering is now able to offer a chiller and air handling unit "package" from a single source

A chiller and air handling unit "package" from one source is now available from GEA Happel since the company launched a new, complete range of air cooled and water cooled GEA chillers on the Irish market through distributors H&M Engineering.

Air-cooled chillers with either scroll or semi-hermetic screw compressors are available with capacities from 10kW to 580kW, and water-cooled chillers with capacities from 12kW to 520kW.

Designed and manufactured to the highest standards to

provide high efficiency, GEA chillers are fully optimised for use with environmentally-friendly refrigerants R134a and R407C to give quiet operation, easy maintenance and minimum operating expenditure.

Combining a GEA chiller with ATplus or ATpicco air handling units and GEA fan coil units offers customers the confidence of buying a complete, highly-engineered system from one source.

Contact: Noel May/Colin Huggett, H&M Engineering.
Tel: 01 - 459 1470/71.

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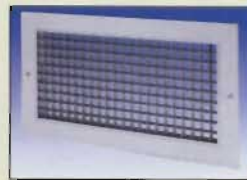
Circular Diffuser



Floor Diffuser



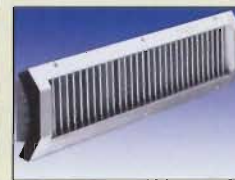
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Air Transfer Grille



Duct Grille



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TRADE NEWS

Wilo's 'Pumping Perfection' at ISH

"Pumping perfection and more ..." was the theme of Wilo's presence at ISH in Frankfurt recently. In order to get the message across, a team of 26 Wilo personnel prepared a presentation which can best be described as an "Event Park". The stand was divided into four areas in which customers were informed about the total Wilo service and product range.

The Wilo "street of innovation" occupied the central area of the stand. The Wilo-Stratos, a new generation pump incorporating ECM technology, was presented in this area. Stand visitors were also informed about several

further innovations such as the new Wilo-Star product range, the new submersible sump pump Twister, the new AF 22 rainwater system, and the new solar pump generation.

Adjoining this area, Wilo's complete product range was presented in a dedicated product area. In a special sales promotion for the exhibition about 1200 Wilo Twister pumps were sold which enabled Wilo to place the product optimally with installers at the start of the product launch.

"But there is more to Wilo than Pumping Perfection", says Tony

Cusack of Wilo Engineering. "For this reason a partner centre was built in which market partners could get information about the different services within the Wilo partnership programme".

Besides new publications like the new rainwater utilisation handbook within the training programme Wilo Brain, Wilo provided information about the new planning software tool, Wilo Select 3.0 online and offline. The green pages — the online directory with which installers can get in contact with their customers (Germany only) — was also featured. In the middle of the partner centre a show stage was placed, on which five actors pointed out in a pantomime comedy routine the USPs of some Wilo products and the content of the partnership programme.

In the adjoining hospitality area, the catering team of Hans Henning provided the stand team and customers with food and drinks. Within this area, Wilo's sales team discussed and exchanged opinions and ideas with customers. The general and very positive internal and external feedback from the market showed that, once again, Wilo set a new milestone in the promotion and development of the brand.

Insulated Chimneys

Insulated Chimneys (Ashbourne) Ltd have moved and are now located at Unit 5B, Summerhill Enterprise Centre, Summerhill, Co Meath.

New telephone and fax numbers are:
Tel: 0405 - 58123/58114;
Fax: 0405 - 58109.

Contact: Brendan Bracken.
Mobile: 086 827 8555;
Peter Farrelly.
Mobile: 086 - 827 8444.

John Craig Appeal

John Craig is a seven-year old boy who has terminal cancer. His ambition is to be included in the Guinness Book of Records for having the largest collection of complimentary slips.

You can help him by sending a compliments' slip to this address.

John Craig, 23 Selby Road, Carshalton, Surrey, SM5 1LD, England.

On Your Bike Gerry!

Toshiba Air Conditioning sponsor the Hawk Racing Team in the British Superbike Championship 2001. Sales Director Ray Ward and Gerry Phelan of Irish distributors G T Phelan will invite guests to follow 13 races throughout the coming season.



Wilo's pumping perfection at ISH



Available from

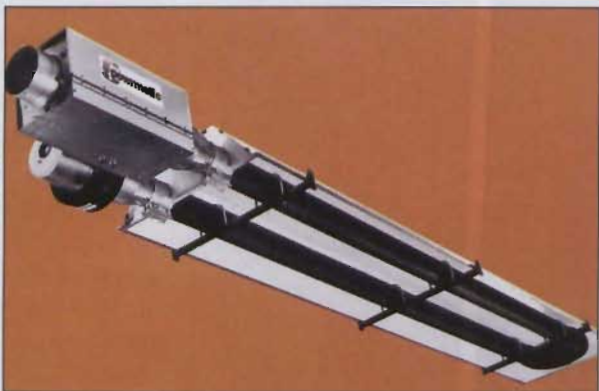


HEVAC LTD,

Muirfield Drive, Naas Road, Dublin 12. Tel: 01 - 419 1919; Fax: 01 - 458 4806

TRADE NEWS

Powrmatic Radiant Tube Heater



Powrmatic has launched a new range of gas-fired radiant tube heaters

Powrmatic has launched a new range of gas-fired radiant tube heaters offering economical warmth for a multitude of industrial, commercial and retail applications.

The heaters are suitable for mounting heights of between 2.3m and 15cm. For application flexibility, three types are available, comprising standard 'U' tube units (PTU), single linear, and double linear tubes (PTS and PTDS). Eight models in each range cover inputs from 9kW to 94kW.

All models benefit from lightweight construction and are easy to assemble and fit. The design includes aluminium reflectors to maximise downward radiation.

A comprehensive range of ancillary components and control options can also be supplied to suit application needs.

Poorly insulated buildings, or buildings where only specific zones require heating, are ideal applications for gas radiant tube. Also, areas where no air movement is required can clearly be served by this form of heating.

Contact: Paddy Lowry, Powrmatic Ireland.
Tel: 01 - 452 1533.

Cylon Controls Moves

As and from Monday, 30 April, 2001, Cylon Controls' Head Office will be located at: Clonshaugh Industrial Estate, Clonshaugh, Dublin 17. Tel: 01 - 245 0500; Main Fax: 01 - 245 0501; Orders Fax: 01 - 245 0502

Wider Choice in Elta's Axial Range

Elta's adjustable pitch Axial fan range is being extended to include impeller diameters of up to 2,000mm. "Range 2000" features two hub sizes — 400mm in diameter, which can house three, six or nine aerofoil blades; or 550mm in diameter, which takes three, six, nine or 12 blades.

Units give duties up to 120 m³/sec and pressures up to 1,200 pa. Custom-built fans are also available for pressures up to 2,500 pa.

Blades can be manufactured from both high-quality pressure die-cast aluminium or glass-reinforced polypropylene (GRP), offering the customer a choice in cost and weight efficiencies. Impeller hubs are die-cast aluminium alloy and the assembled impellers are dynamically balanced to grade G6.3.

Contact: Brendan O'Toole, Fantech Ventilation.
Tel: 01 - 628 6088.



Elta's 2,000mm diameter axial impeller, the latest addition to its Axial fan range. Details from Fantech Ventilation

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Noel May - mobile: 086-8112482
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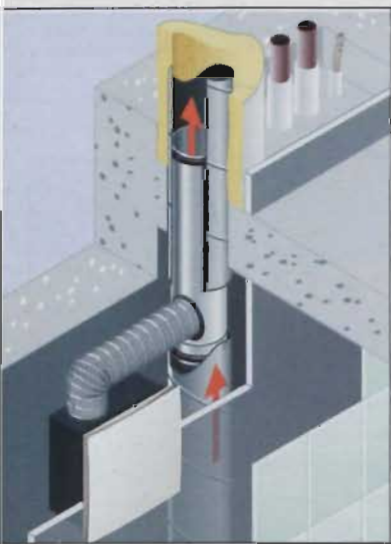
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Maico Aeroduct Fire Protection

The aeroduct fire protection system from Maico, distributed in Ireland by Irish Fan Distributors, offers a system for single-duct air extraction facilities according to DIN 18017, part 3, which needs no fire protection ceiling barrier and fire-proof duct at all. It complies with all required safety regulation (K90-18017) and is approved by the German Building Control Office (approval No. Z-41.6-573).



The Maico aeroduct system from Irish Fan Distributors

The focal points of the aeroduct-system are the Maico air-extraction units with shut-off devices, and the special Maico fire protection compensation elements being installed in the main duct. Thus, in case of fire there is an entirely different functionality compared with the ceiling barrier solution:

— To cut off the main duct, the metallic shut-off devices of the Maico fans will close automatically.

Thus, the penetration of hot and dangerous smoke and fire gases into the main duct is prevented;

— Due to the heat the main duct expands;

— Consequently, also the Maico fire protection compensation element BA expands and as there is no resistance, it slides upwards into the main duct, which is fixed into the ceiling;

— As there is no stiffly into concrete fixed ceiling barrier for instance, no cracks of the ceiling itself can occur anymore. The danger of transmitting the fire into the upper floor is effectively prevented.

— The Maico fire protection insulator BI absorbs the heat radiation of the main duct and prevents in the upper floor a possible fire transmission to other combustible installations in the duct. Any separation is unnecessary.

— As there is no ceiling barrier in the main duct, no smoke can dam up, but can freely escape upwards.

Contact: Billy Wright,
Irish Fan Distributors.
Tel: 051 - 852404.

Ventilation Hygiene Conference & Exhibition 2001 (VHEXCo)

"Hygiene of air conditioning and ventilation systems can no longer be ignored, and the market for ventilation hygiene services is undergoing significant changes as we enter the new millennium", says Martin Deevy of SIBS, who suggests that all those with an interest in the business should attend and participate in the forthcoming Ventilation Hygiene Conference & Exhibition in Birmingham on 23/24 May.

Increasing awareness about indoor air quality, publicity about the potential fire and health risks associated with poorly-maintained ventilation systems, and pressure from insurance companies to reduce those risks, have all resulted in rapid growth for the ventilation hygiene service sector across Europe and the rest of the world. This growth is set to increase steadily, with the introduction of European legislation to establish guidelines for keeping systems clean and healthy.

Ventilation hygiene is a rapidly-changing industry with many challenges for contractors to face as they go into the new millennium. The market is more competitive than ever, standards of quality and professionalism are increasingly important, and establishing a skilled, competent workforce is now vital.

This second Ventilation Hygiene Conference and Exhibition (VHEXCo) will bring together key names from the industry as speakers, and help ventilation hygiene contractors to address those issues which will become more important. The topics discussed will also provide essential material for anyone with an interest in the subject of ventilation hygiene and indoor air quality.

Another aspect of the event is the accompanying trade exhibition, where delegates have the unique opportunity to view the latest technological developments for their industry.

Contact: Marie Payne, VEHxCo.
Tel: 0044 1494 791222.



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TRADE NEWS

Fernox Superconcentrate Range from Hevac

Fernox now offers a revolutionary range of Superconcentrate products through Hevac to care for all central

- Suitable for combination boilers;
- Fernox Superconcentrate are non-hazardous;
- To safeguard the environment the ingredients break down rapidly when disposed of and the packaging uses recyclable materials to the maximum possible extent.

Fernox provides a comprehensive range of preventions, protectors, problem-solvers and remedies, typical examples being:-

central heating system corrosion protectors; central heating system cleaners; leak sealers; Fry's solder and flux; limescale remedies; and jointing compounds.

The miscellaneous Fernox range of related products includes Fix-It: all-purpose epoxy putty; Alphi-11: Fully inhibited anti-freeze; Sterox: Complete kit for chlorinating of water tanks and down services to HS(G)70; and AF-10: Universal biocide for disinfecting header tanks of heating systems.

Contact: Declan Kissane, Hevac Ltd.
Tel: 01 - 419 1919.

Fernox Superconcentrate range from Hevac

heating system needs.

Main benefits are:-

- All superconcentrate products are quickly and easily added via one of the radiator vents;
- A universal applicator is included;
- Applied in minutes, these products save hours;
- Superconcentrate are compatible with all Fernox products, and are suitable for all metals and components commonly found in central heating systems;
- Non-acidic neutral formulation;

Cross Refrigeration Gets Technical

Cross Refrigeration is running a series of technical seminars dealing specifically with energy efficiency, plant optimisation and environmental issues for the industrial refrigeration sector.

The first of the series was held in Cork in March and was well attended by most of the major consultant/engineering houses and a number of chemical/pharmaceutical/institutional companies on the day.

The focus was towards the changes that will take place in the industry over the next few years and to make companies aware of how they can achieve the best results from both existing and new equipment.

With guest speakers from Grasso, Tri-Therm and Danfoss — along with the Cross Refrigeration industrial team — the seminar generated lively debate and discussion on all of the topics covered.

The next seminar will be held in Dublin in June. If you would like to attend or be forwarded information contact David Killalea, Cross Refrigeration.

Tel: 01 - 451 1915.



Attendance at the Cross Refrigeration technical seminar in Carrigaline, Co Cork

Variable Speed Booster Pumps from Wilo

Wilo Engineering Ltd recently introduced its new MHIE range of stainless steel, horizontal multistage pumps. This range is a further development of the successful MHI range, and incorporates automatic variable-speed, controlled, motors. The pumps are available in either AISI 304 or AISI 316 L stainless steel versions and have WRC approval, making them ideally suited to potable water boosting applications. They are suitable for fluid temperatures from -15 up to +110°C.



The Wilo Booster pump

The pumps are supplied as standard with integrated motor overload protection via a PTC sensor and volt-free contacts for both run and fault indication to a building management system. The main feature of these pumps is their hydraulic range, with only four models, they cover a performance range up to

5 L/sec and discharge pressures of up to 8-bar. This is due to the technology Wilo has developed at its R&D facility in Dortmund, Germany. The 3-phase motors used on this range can run at 1500 to 3770 rpm, and the frequency is variable from 26 up to 65 Hz.

To further exploit the performances of the MHIE pumps, Wilo has now incorporated this range into its fully-packaged range of booster pump sets, and this new COR/MHIE/VR booster range is receiving a lot of interest from both specifiers and installers alike. Systems combining up to a max of four pumps can be supplied, achieving performances up to 20 L/Sec.

The microprocessor-controlled VARIO - VR panel manages the pump operating performance, providing a constant

discharge pressure at variable flow rates, matching the required demand. The VARIO panel also offers a host of additional features such as dry-run protection, automatic lead pump cyclic changeover, and contacts for BMS monitoring.

Since their launch, these systems have proved very popular, with other Wilo subsidiaries around Europe reporting high demand. A number of these units have already been supplied by Wilo Engineering Ltd to prestigious projects in Ireland, such as the new hotel extension at Druid's Glen Golf Club in Co Wicklow, and Stratus Computers in Blanchardstown, Dublin. Due to its advantages, this technology is fast becoming the preferred option and no longer the exception.

Catalogue and details available on request.

Contact: Wilo Engineering.
Tel: 061 - 410963.



The Wilo MHIE pump

Smart Air Conditioning from Lennox

As part of the recent launch of its new range of European rooftop units, Lennox has developed a unit for light commercial applications. Called Smart, it incorporates components and delivers efficiency normally only found in larger rooftop units.

The Smart — available in capacities from 10kW to 15kW — has been designed to meet project specification requirements on a pan-European scale. Developed with scroll compressor technology, the Smart is claimed to set new standards in cooling efficiency, with fewer moving parts providing greater reliability.

The Smart incorporates a low noise fan and has a non-corrosive PVC-coated steel wire coil guard, which directs debris naturally away from the coil, maintaining unit efficiency.

Available in R22, with cooling only and heat pump capabilities, units in the Smart range are particularly suited for light commercial applications, including petrol stations, shops, restaurants, freight containers and temporary office accommodation.

Contact: Vincent Mahony, Walkair.
Tel: 01 - 456 8070.

The Versatility of Copper

Copper has been the pre-eminent material for plumbing and heating systems for over 50 years and will continue to have a prominent place in the market for many years to come. This is because copper has successfully evolved to meet the changing requirements of installers and specifiers and this is widely recognised within the industry, writes *Conor Lennon of Irish Metal Industries*.

Copper has always been versatile. For just one example of its adaptability, look no further than pressurised systems. Consumers are increasingly moving towards pressurised systems in heating and plumbing installations because people want smaller, less obtrusive installations within the home. This new desire for

pressurised systems means that smaller bore tubes are increasingly in demand because of the need to conserve space. Small bore copper is the ideal material for this as it is very strong, reliable and takes up little space.

Staying competitive in today's heating and plumbing market also means finding new ways to

improve product ranges. That's just what European Copper Plumbing Promotion Campaign companies are doing by introducing new ranges of fittings to meet changing requirements.

David Sherry of the European Copper Plumbing Promotion Campaign commented: "Over the last couple of years manufacturers have been developing new products, with fittings to make the job easier and speed up installation times. But even before the introduction of these products, copper was able to meet any installation requirement. Whatever the installation, copper can fit it. That is one of the reasons why it is still the most popular material."

Push-fit fittings help to meet three of the most urgent challenges facing both installers and contractors:

- installing systems in less time without losing quality and reliability;
- making the most of tradesman's skills;
- meeting the demands of insurance companies and clients for heat-free jointing;

With push-fit based jointing systems, installers can meet these criteria, and still give customers the value and neat appearance of copper pipes. These fittings have an unobtrusive appearance, useful where pipe and fittings will be in view, and connections can be made in seconds but with the strength of a metal-based fitting. The fittings can be disconnected easily and joints remade as required.

Another new development is the introduction of press fit fittings which allow a fast,

efficient joint to be made. They rely on pressure from a press tool to achieve a sound joint without the need for solder, adhesives or any additional jointing materials. The press tool compresses the fitting and the 'O' ring seal onto the tube on two planes, giving the joint positive interlocking and frictional restraint. They are designed for use in hot and cold water services, heating and chilled water applications.

Along with versatility, copper is also considered extremely reliable. Focus group research commissioned by the European Copper Plumbing Promotion Campaign found that "Copper was unanimously regarded as the most reliable material." According to one plumber quoted in the research: "Copper is tried and tested, it just keeps on going until it is 50 or 60 years old..."

David Sherry added: "Copper's future is assured and installers surveyed in the research expect copper to maintain its share of both commercial and domestic installations because of its specification, reliability, history and aesthetic qualities. There will always be copper, it's a proven material."

For further information on copper, installation tips and the answers to some of the most frequently asked questions about installation, visit:

www.ukcopperboard.com

Contact: Conor Lennon, IMI. Tel: 01 - 295 2344; Fax: 01 - 295 2163; email: conor.lennon@irishmetalindustries.com



"Copper is tried and tested ... it just keeps on going"

BATHROOMS & ACCESSORIES

Put That in Your Pipe and Push it!

MFP Sales has introduced the new Multikwik Rainwater Adaptor (MKRAB) which is claimed to be the simplest and most effective connection for rainwater downpipes. The Multikwik Adaptor connects square and round (65mm/68mm) downpipes to standard 100mm pipes. No solvent weld is required, just a simple push fit, saving time, energy, and often another component. Tests have shown that the joint has withstood over 0.5m head of water, far in excess of the requirements of the application.

The Multikwik Rainwater

Adaptor (MKRAB) follows closely on the heels of the

Universal Adaptor which has seen great success in Ireland since its launch last year.

Supplied in Ireland by MFP Sales, the new Multikwik is the new

push-fit connection for rainwater downpipes.

Contact: Dudley Foster, MFP Sales. Tel: 01 630 2600; Fax: 353 (0)1 628 1119; Email: sales@mfp.ie Website: www.mfp.ie



The new Multikwik Rainwater Adaptor from MFP Sales.

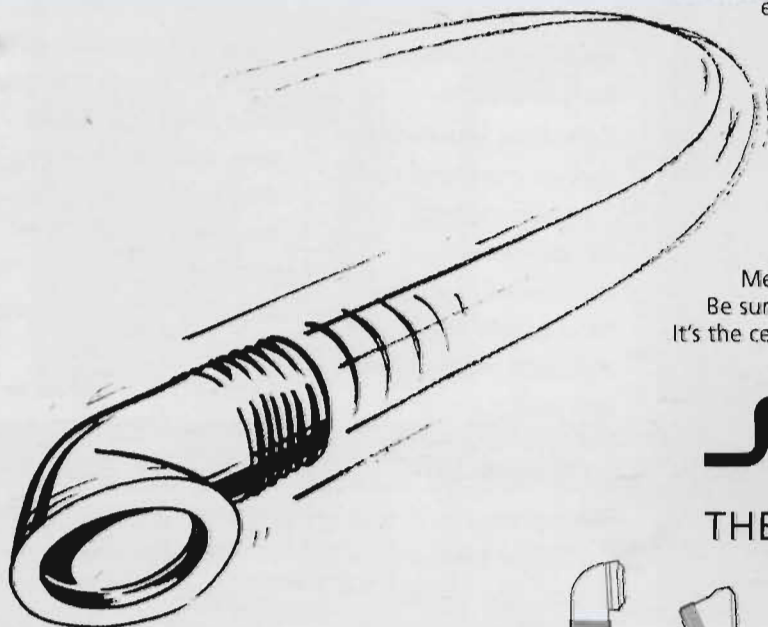
Tight on the bends.

Multikwik connectors remain watertight and airtight in the toughest conditions. Moulded from strong flexible ethylene vinyl acetate copolymer, they're designed to work with unfailing dedication to duty year after year after year.

A range of over eighty simple-to-fit sizes and a whole host of uniquely gripping features make life easier for installers.

With certification by the British Board of Agrément, plus thirty years of experience, Multikwik is a name that spells complete confidence for Specifiers, Merchants, Contractors and Plumbers.

Be sure, be better, be a *genuine Multikwik* fitter. It's the certain way to be well connected.



Multikwik

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Contact:

MFP Sales Limited, Lucan, Co. Dublin. Sales: Tel. (01) 630 2600. Fax: (01) 628 1119.

BATHROOMS & ACCESSORIES

Chadwicks Bathroom & Tile Collection Showrooms

When it comes to bathrooms Chadwicks Plumb Centres' dedicated Bathroom & Tile Collection Showrooms have no equal.

The product range stocked is vast, taking in all the leading brand names in each of the product areas represented, in addition to a select range of own-brand products.

This includes the Euro Collection, a complete range of bathroom furniture by Coycoma, incorporating cabinets, vanity units, marble washbasin tops, and a choice of wall and

cupboard units.

They also stock showers, shower doors, overbath screens, and a comprehensive range of bathroom accessories. All the related plumbing and pipework requirements can also be provided.

Apart from serving the direct needs of plumbing contractors and bathroom installers, the Bathroom & Tile Collection Showrooms also serve as a focal point where the trade can bring their customers to see the product.

The extensive choice offered is presented in attractive room settings which allows for easy



Chadwicks bathroom and tile showroom, Lucan, Co Dublin



Chadwicks bathroom and tile showroom, Cork

comparison. Choosing a bathroom suite is a very personal thing, people's needs and preferences varying enormously. The Bathroom & Tile Collections Showrooms concept meets that need.

Equally important is the advisory service. Experienced staff are on hand to help the installer, and client, make the most appropriate choice to meet each individual's requirements and budget constraints.

This quality-driven service also includes excellent stock availability; on time site delivery to the designated point; and

value-for-money prices.

Being part of the Grafton Group plc underpins the quality of the service provided. It allows for Group strengths to be availed of at local level, while also ensuring that the massive buying power it represents is reflected in the competitive prices offered.

Chadwick's Plumb Centres' Tile & Bathroom Showrooms are strategically located throughout the country to ensure nationwide coverage. See page opposite for full details of the various locations.

CHADWICKS PLUMB CENTRE



CHADWICKS extensive branch network and dedication to customers service makes us best qualified to meet all your plumbing, heating and bathroom requirements . . .



Bathroom & Tile Collection

CHADWICKS



**CHADWICKS
PLUMB CENTRE**



CHADWICKS Plumb Centres are ideally placed to offer you the following wide range of services:

- Plumbing, Heating and Drainage equipment
- Bathroom suites
- Showers and Shower doors
- Tiles
- Bathroom accessories

CHADWICKS Nationwide Branch Network

1. Stillorgan PC †	Ph: 01 295 8080	9. Sallynoggin*	Ph: 01 285 1233	16. Castlebar	Ph: 094 21077
2. Walkinstown PC †	Ph: 01 460 0166	10. Lucan*	Ph: 01 628 2122	17. Kilkenny	Ph: 056 21044
3. Cork City PC †	Ph: 021 4320456	11. Bray	Ph: 01 286 4511	18. Wexford	Ph: 053 23699
4. Limerick PC †	Ph: 061 313 822	12. Walkinstown BC	Ph: 01 456 6722	19. Clonmel	Ph: 052 21822
5. Coolock*	Ph: 01 847 5733	13. Navan*	Ph: 046 21999	20. Midleton*	Ph: 021 631311
6. Glasnevin	Ph: 01 830 7811	14. Naas	Ph: 045 876711	21. Mallow	Ph: 022 21844
7. Thomas St.*	Ph: 01 454 2200	15. Athlone	Ph: 0902 72751	22. Nenagh	Ph: 067 32088
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Hot Water
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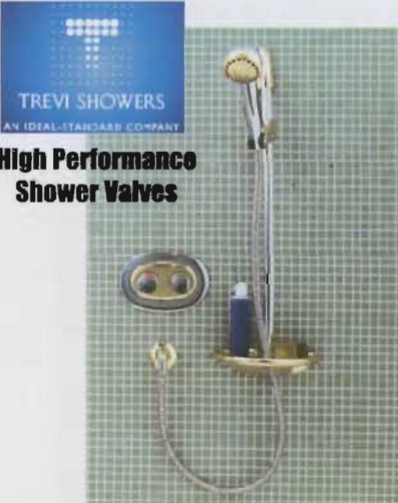
DESIGN TECTUR

BATHROOM CABINETS



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KITCHEN SINK PERFECTION



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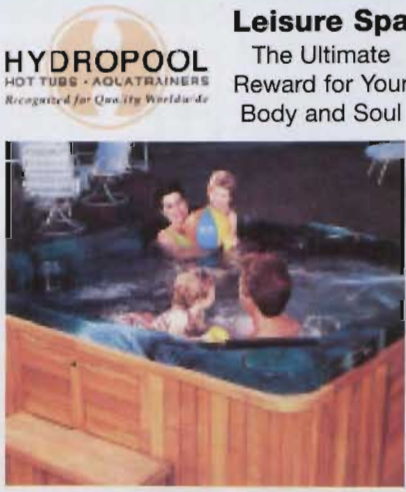
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BATHROOMS & ACCESSORIES

Myson Towel Warmers

Elegant and stylish, Myson towel warmers will enhance the appearance of any bathroom. Economical and efficient, they also add to the comfort of the room, as well as keeping towels warm and dry.

There is a wide range of standard units of different designs to choose from, or you can have one manufactured to your own personal requirements. These modifications include size, shape, colour, changes to tapping size and position, dezinc proof units, and copper panel radiators.

Myson operates stringent quality controls to ensure that the highest standards are maintained, with every unit being pressure tested before leaving the factory.

Bringing together quality and craftsmanship, designed and manufactured by the market leader, Myson Towel Warmers are available nationwide.

Contact: Vincent Broderick, Potterton Myson (Irl) Ltd. Tel: 01 - 459 0870; Fax: 01 - 459 0880; email: post@potterton-myson.ie



From the classic range of Myson towel warmers.

Heatmerchants/ Tub & Tiles: 'Bathrooms are a Fashion Business'

We spend six days each year in the bathroom yet it remains one of the most neglected rooms in terms of style and design. No more say Heatmerchants/Tubs & Tiles.

At any of their 21 nationwide showrooms you'll find the most up-to-the-minute designs in bathrooms with something to suit every budget and taste.

Heatmerchants/Tubs & Tiles are the leading suppliers of quality bathroom suites in Ireland. Their constant effort to remain as the number one retailer of bathroom suites ensures that they sell the most stylish sanitaryware available in Ireland at value-for-money prices.

Tubs & Tiles have noticed a marked increase over the last five years in people visiting their showrooms months in advance of requiring the bathroom suite. Most spend a great deal of time looking at what is on offer and what to accessorise their suite with. Should it be a wooden bath panel and toilet seat or the very latest in quality bathroom furniture? The possibilities are endless at any Tubs & Tiles showrooms.

Plumbers too have also noticed the increase in the attention the bathroom now gets.

Standard suites generally provided in the PC Sum for the housing development are generally upgraded. Most Tubs & Tiles showrooms feature approximately 25 full bathroom suites, 15 ensembles, 12 working showers, 20 shower enclosures, up to 70 different types of wood flooring, as well as hundreds of wall and floor tiles. Their new flagship store at Fonthill Road, near Liffey Valley Shopping Centre, Dublin, features 100 bathroom suites and 3000 wall and floor tiles.

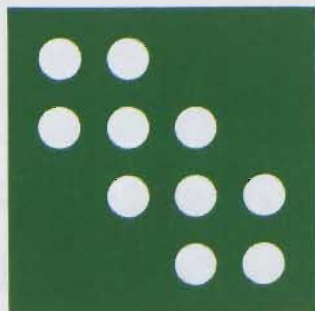
Highly competent and trained sales representatives are on hand in the showrooms to recommend the ideal bathroom suite and accessories for your requirements.

For those interested in sanitaryware for commercial applications, all Heatmerchants and Tubs & Tiles branches have a representative who will be able to specify the exact suite for you.

Heatmerchants/Tubs & Tiles branches are located in Athlone, Bray, Cork, Dublin, Galway, Kilkenny, Limerick, Navan, Sligo, Tralee and Waterford. Contact: Head Office at Tel: 0902 - 24000 for further information.



All our tubes are up to the Mark



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Irish Metal Industries supply a complete range of copper tube for hot and cold water installations, gas services, sanitation, central heating and numerous other building and engineering applications.

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Service Line: For orders and further information.

Telephone: (01) 295 2344/295 2137.

Fax: (01) 295 2163

Irish Metal Industries Ltd, 25 Spruce Avenue,
Stillorgan Industrial Park, Blackrock, Co Dublin.

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BATHROOMS & ACCESSORIES

Thoroughly Modern Matki

Radiance is designed for the "shower & go" people of today ... bright cheerful and discreet, just right for the energetic pace of modern life. Radiance shower doors and surrounds are strong and practical with an understated stylishness that blends perfectly with modern millennium home decor.

The gentle, soothing curves of the Radiance design are highlighted by the brilliant finish of the rigid aluminium frames in

Aztec Gold, Celtic Silver, or Polar White. For an additional touch of class there is decorative glass — Waveline, simplicity itself, while Victoriana positively breathes nostalgia.

Above all, Radiance is functional with its easy-access openings, solid safety glass to BS 6206A, stabilised frames, tight seals and simple maintenance procedures. Practical, good-looking, safe and secure for all the family — that's Radiance from Matki.

Features & Benefits

- Expensive "jeweller's" polishing process gives a brilliant, high-lustre finish to frames;
- Clever "snap-on" inner mouldings hide all screws and fixings;
- All frames and door parts are highly polished;
- Simple, plain glass or tasteful, decorative patterns;
- Strong, reinforced, rigid frames that do not shudder or shift;
- Precision engineering for smooth action and easy operation;
- Chunky safety glass and solid glass handles;
- Secure, retentive seals for watertight closure.

New Radiance, with its timeless elegance and future-proof design, is worth every penny, especially with the reassurance of a 10-year guarantee. All parts are fully covered plus a two-year guarantee covering labour.

A typical example from the range is the new Radiance curved door.

This offset sliding door come complete with cast stone shower-tray. The rigid curved shower doors comes in safety glass with high-lustre anodised/coated aluminium frames to match chrome or gold bathroom accessories. Height is 1970mm, including shower tray.

Clean design lines give an airy feel to any good size bathroom. A single slightly offset sliding door glides effortlessly behind the fixed panel. Panel overlap and seals mean the new Radiance Curved doors can be used with power showers. Part-assembled for quick and easy installation, the



The new Matki walk-in is a simple, efficient shower shield with classic, opulent fittings and no door to open or close curved doors adjust to out-of-plumb walls.

The gentle, sympathetic curves with concealed fixings are complemented by cool colours — Aztec Gold, Celtic Silver and Polar White; plain and simple clear glass for a clean look; solid brass, chrome or gold plated handles; dedicated shower tray in any bathroom colour.

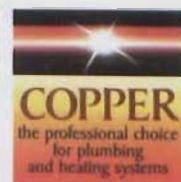
Contact: Aidan Vance, BJ Caraher (Distributors) Ltd. Tel: 048 97 511071; Fax: 048 97 510921; email: aidan@bjcaraher.co.uk



The new Matki Radiance curved offset sliding door



“Plastic has its uses. I use it all the time to buy copper.”



For further information, please contact the European Copper Plumbing Promotion Campaign, 1 Chelsea Manor Gardens, London SW3 5PN
Tel. 0171 351 2400 Fax. 0171 352 6244 E-mail: copperboard@gciuk.com www.ukcopperboard.co.uk
Published by ARROW@TU Dublin, 2001

Copper and Bacteria

Extract from a paper by Colin Reid, Copper Development Centre, South East Asia and Tony Rayne, International Copper Association

Copper's bacteriostatic properties have long been known, but their importance in maintaining water quality in the system has not been fully understood. Field studies of plumbing systems in the UK and Germany have indicated that copper appeared to have a beneficial effect in preventing the growth of dangerous pathogens such as Legionella.

E. Coli Bacterium

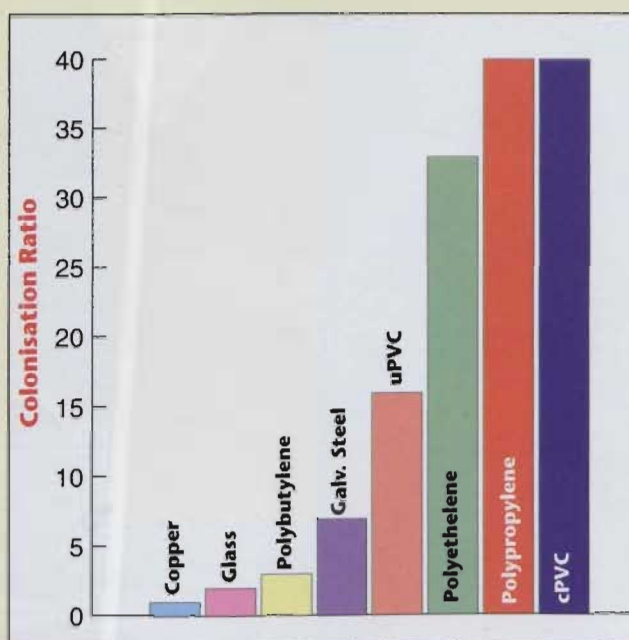
The Midwest Research Institute, USA, undertook some preliminary laboratory studies in which bacteria were introduced into 50 feet coils of differing plumbing tube materials. Water with a suspension of E. coli, a bacterium well known for causing stomach upsets, was pumped through the coils and changes in bacterial viability periodically determined. It was found that after five hours in a copper loop only 1% of the E. coli bacteria remained viable. In similar coils with other types of plumbing tube material, including a control loop of glass, the level of bacteria remained the same, or in some cases even increased.

Legionella pneumophila

Subsequent research at the Centre for Applied Microbial Research, Public Health Laboratories Services (PHLS) in England has looked at the growth of the Legionella bacteria,

systems and permits scientific study of the growth of microorganisms in biofilms in a manner similar to that of an actual plumbing system.

The growth of Legionella bacteria and other microorganisms were



on a variety of plumbing materials in comparison with glass used as an inert, control test material.

For this research a continuous culture model system was developed to study the development of complex biofilms containing Legionella on copper and other plumbing materials. The laboratory system can mimic the conditions found in plumbing

monitored and regularly sampled, using waters of different hardness and a range of temperature between 20°C and 60°C. The Public Health Laboratory Service compared the number of colony forming units (a unit for measuring numbers of bacteria) for both the total microbial flora and Legionella recovered from each material.

The results of this research show that the levels of total bacteria are reduced on copper surfaces compared with the glass control and other plumbing materials.

The numbers of total flora and of Legionella vary with temperature and water hardness. At 40°C and 50°C for example, polybutylene was colonised greater than cPVC, whilst at 20°C the bacteria counts on cPVC were greater than polybutylene.

However, at all the temperatures tested: (20°, 40°, 50° and 60°) and in the three different waters:

- soft peaty water
- moderately hard river derived water
- hard bore hole derived water

copper colonised less than any of the other materials including the glass control.

Contact: Conor Lennon, IMI. Tel: 01 - 295 2344; Fax: 01 - 295 2163; email: conor.lennon@irish-metalindustries.com

Control Aer Does It For Muscular Dystrophy

Control Aer has finally met its Christmas promise. After months of delays and additional time customising, it has finally delivered the long-awaited Volkswagen Caravelle (£40,000) to its chosen charity, Muscular Dystrophy Ireland (MDI). This vehicle will now be used on a constant basis by MDI members to do the things which the able-bodied among us take for granted.

Many MDI members are wheelchair-bound and constantly suffer from isolation and difficulty in getting to work, visit hospitals, clubs, take holidays, etc. Now this specially-adapted vehicle will bring a new lease of life by way of new-found mobility.

"It all started last year when the subject of Christmas presents was being considered", says Control Aer Financial Director, Michael Renaghan. "Why not make a real difference this year by putting this money to better use by supporting a worthy cause with it, we thought.

"Naturally, we tested customer reaction to the idea and were delighted to discover that they were very supportive. Even our own staff accepted that these boom times which the building sector is presently enjoying would be the best time, if not the right time, to share that success with those less well off.

"Once the support of both customers and staff had been achieved, the wheels were put in motion to turn the idea



Siobhan Windle, Respite Co-ordinator, MDI with Seamus Fagan, Rush, Co Dublin, Michael Renaghan, Financial Director, Control Aer, and Judy Windle, Chair, MDI

into a reality. Not having any particular affiliation with any specific charity, Control Aer made contact with quite a few to gauge their needs and the way in which we could best present a donation with a difference.

"It was MDI who responded most enthusiastically and so meetings were arranged in their offices in Coleraine Street to discuss the specific details of this charity's work. Once we heard the particular plight of families with one or more members suffering from muscular dystrophy, it became all the more real that what we were doing was something we possibly all should have been doing long before now.

"It was discovered during our meetings with MDI that the type of vehicle that best suited their needs would cost twice as much as we had envisaged, and four times as much as was originally budgeted. Nonetheless,

we were more committed now than we had ever been and felt that somehow there would be a way if the will was strong enough and so it was. The financial constraints were overcome and the specific van specified was purchased.

"For company directors interested in pursuing a similar route at their year

end, I am willing to make all the documentation and support material available so they can do so in the most tax-efficient way, ensuring the maximum benefits to their nominated charity.

"The whole experience has been a moving one and the gesture — though small from a company standpoint — has been both rewarding and fulfilling (far more so than any party or Christmas present ever bought). It is fair to say that no year end in future will pass without considering whether or not it would be possible to do something similar again. Our customers and their loyal support made Control Aer's success what it's been and, Lord willing, if their charity continues to lean towards sacrificing the expected hospitality at Christmas, perhaps it can happen again and maybe it might just catch on across the entire industry".

Muscular Dystrophy — A General Description

Muscular Dystrophy is a collective term for a wide range of neuromuscular disorders characterised by the progressive wasting and weakening of muscles. It can affect both adults and children. All forms of muscular dystrophy are hereditary, with the genetic defect transmitted by one parent in some forms or both parents or both forms in others. However, there are many cases of muscular dystrophy in families with no known history of the condition which are caused by a spontaneous mutation in the genetic makeup. It is a condition which affects only males. As the muscles deteriorate the affected boy becomes weaker over a period of time and gradually loses the ability to walk. Due to the progressive nature of the disorder, these boys eventually require the use of an electric wheelchair.

There are many other forms of neuromuscular conditions, which vary in how they are inherited and how they progress.

STORAGE TANKS

The ACV Tank-in-Tank and Delta Concepts

ACV International has been making boilers and domestic hot water producers for more than 75 years. Increasingly, large-scale applications have become a speciality. Wherever hot water is needed and reliability is paramount, ACV is the answer.

Over the years ACV has been responsible for quite a number of inventive and innovative industry "firsts", the most notable being the Delta and Tank-in-Tank concepts.

Delta

The "Delta" was conceived in 1974 and is, in effect, a domestic hot

water (DHW) generator which is also capable of providing central heating. It operates equally well with gas or oil firing, and is available over a wide range of outputs.

The ACV-developed Delta is probably the first appliance to put the accent on domestic hot water generation. Its concept is the complete opposite to the traditional system where the cylinder is simply considered to be

an accessory of the boiler. The Delta is nothing but a hot water generator which has solved the problems associated with lime deposition by introducing a primary circuit. From this it was only one step to use it as a boiler. An extensive model choice is now available. A typical example is the Heat Master dual-function direct-fired water heater ... and boiler.

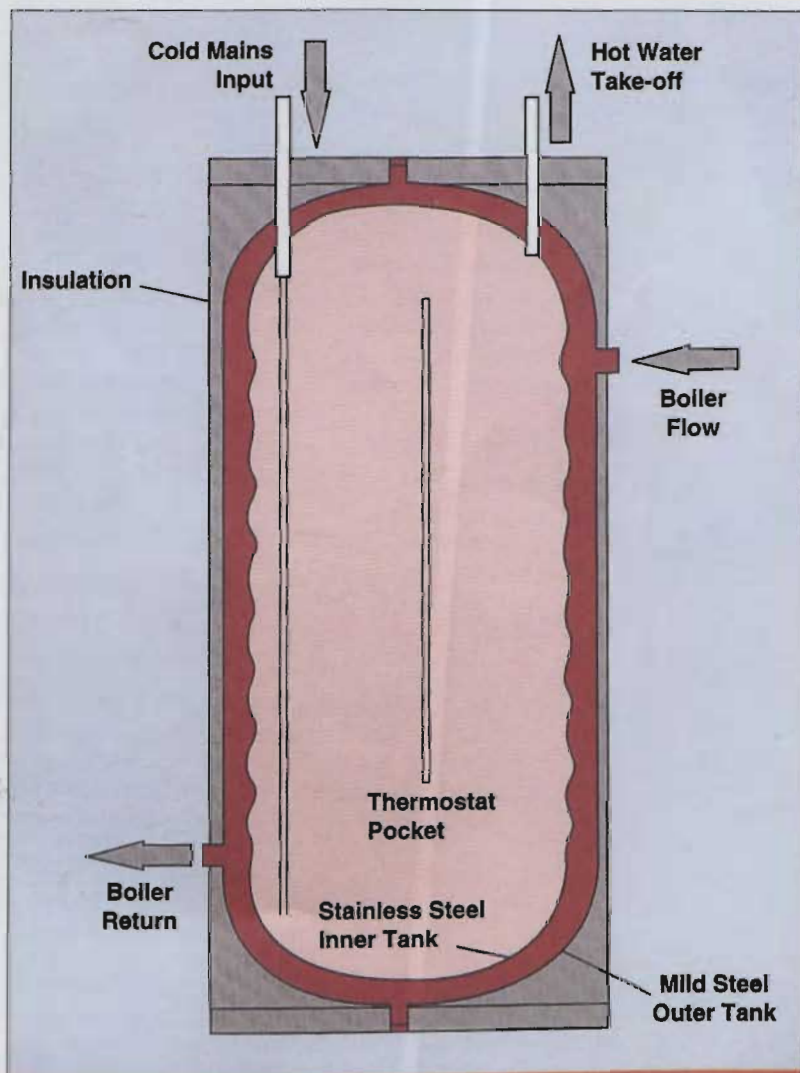
Tank-in-Tank

The name 'Tank-in-Tank' was coined at the beginning of the 1980's to describe a type of tank which could not be classified either as a cylinder with a coil, or as a twin-wall tank.

The difference between ACV tanks (cylinders) and those with coils is clear, because in the ACV tank the primary fluid heats the domestic hot water (DHW) from the outside in, while the others heat from the inside out.

The decision to use stainless steel for the manufacture of the Tank-In-Tanks was made because of its well-established reliability over other materials. It is stable at elevated temperatures, which is not always the case for cylinders manufactured from mild steel and protected by a coating. ACV tanks are capable of storing domestic hot water at elevated temperatures of up to 85°C.

Applications for the ACV Tank-In-Tank principle are widespread and include district heating schemes, solar energy systems and even connected to a heat pump.



Contact

John Duignan, C&F Quadrant.
Tel: 01 - 630 5757; Fax: 01 - 630 5706;
email: sales@cfquadrant.ie

Contact

Bernard Costelloe, Eurofluid Handling Systems.
Tel: 01 - 460 0352; Fax: 01 - 450 7634;
email: eurofluid@tinet.ie

KESTON

Spa

KESTON HEATING PRODUCTS LTD,
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Cookstown Industrial Estate, Tallaght,
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High Performance Stainless Steel Unvented Hot Water Storage System

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- No anode required
- Domestic and Commercial models
- Rapid heat recovery
- Variety of sizes from 125 litres to 400 litres
- Dramatic fuel savings through reduced boiler cycling
- Perfect match for Keston wall mounted gas condensing boilers

S T O R A G E T A N K S

Keston Spa — The Most Versatile Hot Water Cylinder

The Keston Spa ultra-high performance hot water storage system is the result of extensive research, development and testing.

The unvented hot water storage system is extremely efficient and has a much higher performance than most cylinders offering many unique benefits to the installer and end user.

There are models for domestic and commercial applications in 125-litre,

200-litre, 300-litre and 400-litre versions with very large coil sizes. For example, the 125-litre domestic cylinder has a coil size of 1.2sqm and coil rating of 33kW and the 400-litre commercial cylinder, a coil size of 2.6sqm and coil rating of 65kW. A 3kW (21/4") immersion heater is also provided as an additional back-up heat source.

All models are supplied complete with bracket for optional wall hanging.

The Keston Spa has one of the most rapid heat transfer and recovery rates available by virtue of its generously-sized indirect coils. This means far more hot water can be produced on demand from a much smaller unit. All homes and commercial premises have varying requirements when using domestic hot water and there is a Keston Spa to supply instant hot water whatever the need.

High-grade stainless steel is used for the heating coil and cylinder body and there is no need for an anode.

Unlike many water storage systems, Keston Spa has an external expansion vessel so all the volume of the tank is used for storing water. Temperature and pressure

relief valve, overheat control, thermostat — a full unvented controls kit — is packaged with the unit. There are also purpose-made connections for a secondary return loop and/or drain off.

The cylinder benefits from full high-density insulated CFC-free foam and loses minimal heat when off. It is finished with an attractive enamelled outer shell.

Keston Spas will give years of efficient service, save pounds on the fuel bill, provide premises with as much hot water as it demands, and carries a 5-year anti-corrosion warranty.

Contact: Frank Forde, Keston Heating Products.
Tel: 01- 462 1753;
Fax: 01 - 451 7613.



The Keston Spa range of ultra-high performance hot water storage tanks is available from Keston Heating Products.

Domestic Models

Performance Data	Spa 125	Spa 200
Max Working Pressure	12.0 bar	12.0 bar
Immersion Heater Output	3kW	3kW
Coil Surface Area	1.2m ²	2.4m ²
Rated Coil Output	33kW	62kW
1st Hour Performance (10/45°C)	917 litres	1693 litres
Continuous Performance (10/45°C)	811 litres	1523 litres
Recovery Time (10/45°C) approx.	9.3mins	7.9mins
1st Hour Performance (10/55°C)	737 litres	1355 litres
Continuous Performance (10/55°C)	631 litres	1185 litres
Recovery Time (10/55°C) approx.	11.9mins	10.1mins

Commercial Models

Performance Data	Spa 300	Spa 400
Max Working Pressure	12.0 bar	12.0 bar
Immersion Heater Output	3kW	3kW
Coil Surface Area	2.6m ²	2.6m ²
Rated Coil Output	65kW	65kW
1st Hour Performance (10/45°C)	1852 litres	1937 litres
Continuous Performance (10/45°C)	1597 litres	1597 litres
Recovery Time (10/45°C) approx.	11.3mins	15.0mins
1st Hour Performance (10/55°C)	1497 litres	1582 litres
Continuous Performance (10/55°C)	1242 litres	1242 litres
Recovery Time (10/55°C) approx.	14.5mins	19.3mins

STORAGE TANKS

Albion Superduty Energy Saver

Albion Superduty cylinders are available in a range of sizes to suit individual household requirements.

They are suitable for modern pumped heating systems fuelled from mains gas, lpg or oil boilers, especially condensing

unparalleled in systems of this type.

Superduty cylinders heat a full tank of water in a matter of minutes!

All Superduty cylinders are insulated with a CFC-free, factory-applied, insulation unique to



boilers. They are compatible with all controls and programmers. Usually, the installer will be able to replace the existing hot water tank using existing pipework, ensuring a quick and easy installation with minimum inconvenience.

Unlike a conventional system which uses a single coil to transfer heat from the boiler to the store of water, Albion Superduty cylinders use a revolutionary Multicoil Heat Exchanger which provides performance

Albion. This has the added benefit of keeping water hot for even longer!

Ultra-fast recovery of hot water allows for a reduction in unit size. A smaller boiler sized for central heating only can be used as the hot water temperature recovers so quickly!

Superduty carries a 5-year guarantee as standard.

Contact: Aidan Vance,
BJ Caraher (Distributors)
Ltd. Tel: 048 97 511071;
Fax: 048 97 510921;
email:
aidan@bjcaraher.co.uk

Lycris-Byrne Copper & Steel Cylinders

Nationwide Insulations Ltd
t/a Lycris-Byrne, Fairgreen
Road, Bray, Co Wicklow.

Tel: 01 - 286 3794;

Fax: 01 - 286 1213

email:

info@lycrisbyrne.com



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specialists in Copper
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Calorifiers, Heat
Exchangers, Water
Purifiers, Scale Inhibitors,
Pumps

S T O R A G E T A N K S

Lycris Byrne Offers Total Solutions

The Lycris-Byrne Combination Unit continues to be specified by numerous local authorities, including Dublin and Cork corporations and Sligo County Council. These combination units, which Lycris-Byrne can customise by making to individual size requirements, are proving to be uniquely suitable for the refurbishment of inner city flats, etc. Many private-sector housing developments have also found these units to be most efficient for apartment and high-density housing developments.

That patented pre-plumbed indirect combination unit includes everything necessary to provide pressurised hot and cold water services with the minimum of on-site work. The only connections required are the incoming mains water cold feed, the outgoing hot and cold supplies, and electrical connections for the pump and immersion heater(s).

Each unit comes complete with its own cold water storage tank, hot water copper cylinder, circulation pump, thermostats and valves. All internal piping and wiring are completed at the factory.

Lycris Byrne's glass-lined steel hot water storage cylinders are available with stainless steel automatic booster pumps. They have double glass lining and are capable of 10-bar working pressure. The rapid recovery coils may be used with hot water or steam, and heat the cylinder from the bottom, eliminating Legionella spread.

With provision for electric immersion heaters and high-grade insulation, these units come with attractively-painted outer metal protective casing in a complete range of capacities.

With the increased

incidence of acid rain, and the general increase in corrosion caused by the decrease in water quality, the only real long term solution to hot water storage is a glass-lined steel cylinder.

The Lycris-Byrne range of glass-lined steel hot water-storage cylinders are of patented all-welded construction and intended for domestic and industrial use. There are three major advantages in using glass-lined steel cylinders. Firstly, these cylinders are particularly suitable for use in areas of high corrosion; Secondly, they can be used in unvented or vented systems without all the expensive control valves and fittings, as the unit can operate at up to 10-Bar, with only the normal pressure relief valve required; Thirdly, these cylinders can be used in place of existing copper hot water storage cylinders using standard

BSP connections.

Calorifiers — Lycris Byrne is enjoying continued success with its large calorifiers for industrial and commercial use in both copper and glass-lined steel. They are one-off, custom-designed units to match individual requirements and can be heated by steam or water heated batteries, or externally-mounted heat exchangers.

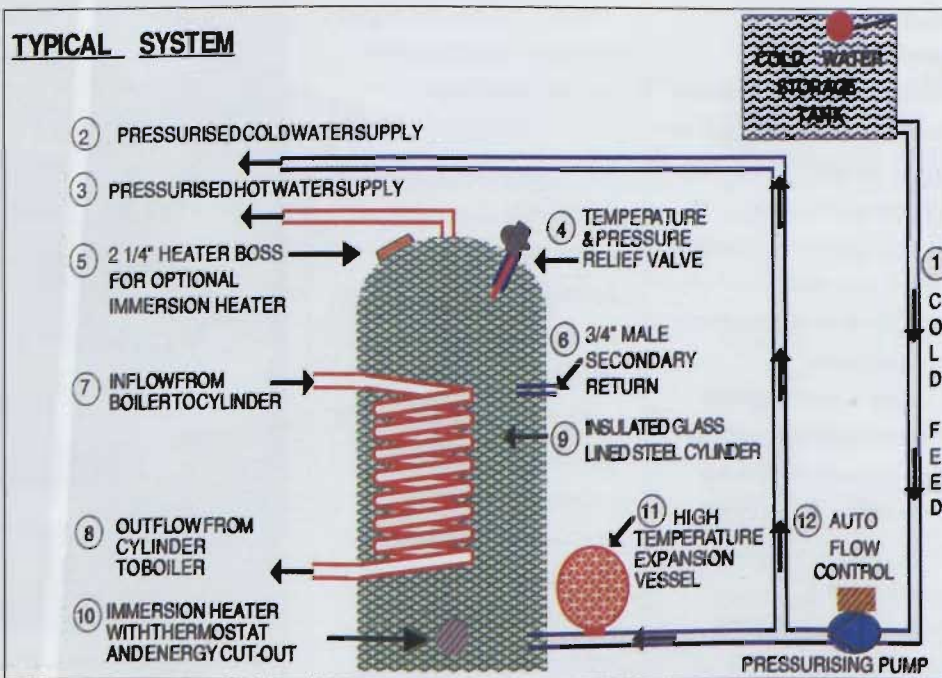
Insulation — Increased energy awareness has increased demand for insulated cylinders, and Lycris-Byrne is now insulating 90% of its production. To match this demand, Lycris-Byrne has recently installed an automatic insulation plant which has further increased its production efficiency.

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email: lycrisby@iol.ie

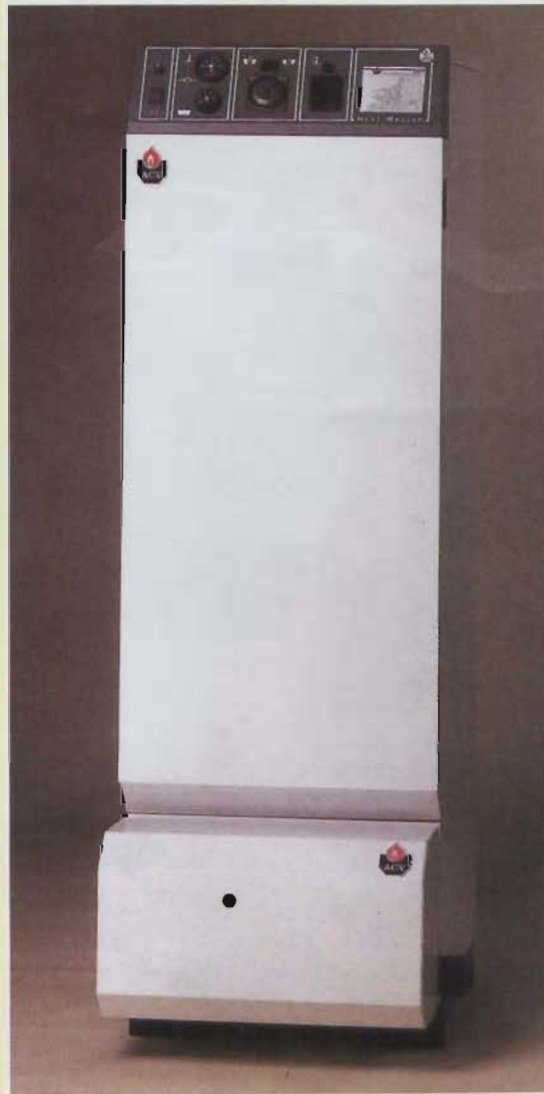


Lycris-Byrne glass-lined steel hot water storage cylinder



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Quadrant House, Chapelizod, Dublin 20.

Tel: 01 - 626 5711/626 4917;

Fax: 01 - 626 7863/626 3251

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Catering for Industry's Future Skills Requirements

Following last month's overview of the organisational changes at DIT Bolton Street, this month we focus on the new management structure of the Department of Construction Skills. We concentrate on the many courses and services provided to the



Seamus Murran, Head
Department of Construction
Skills, DIT Bolton Street

construction industry at large and, more specifically, the building services sector.

Now Head of the Department of Construction Skills, Seamus Murran is widely known and respected throughout all sectors of the construction industry. A long-standing DIT member and strong

supporter of all manner and number of industry initiatives over the years, Seamus is now charged with developing and shaping the educational services provided by his Department to suit the growing and ever-changing needs of the industry.

Assisting him in this endeavour are John Smartt, Assistant Head, Plumbing, Heating & Refrigeration; Fred Hosford, Assistant Head, Brickwork & Building Maintenance; Peter Clarke, Assistant Head, Plastering & Decorating; and Jimmy Kelly, Assistant Head, Carpentry, Joinery, Cabinet-making & Wood-Machining.

They are assisted in turn by a team of teachers, assistant-lecturers, lecturers and technicians.

While Fas looks after the junior apprenticeship cycle, DIT Bolton Street takes the senior cycle. This, in effect, means that Seamus and his team are dealing at any one time with approximately 1000 young men and women who are in full-time employment and who attend lectures over a 10-week period for the Phase 1 stage, and then a further 10-week period for the Phase 6 stage.

The course content covers design, practical, technology and construction skills, and comprises a 35-hour week for the duration of each stage.

Qualifications on successful completion are the National Craft Certificate.

Additionally, there is an ever-expanding further education programme which, once again, covers all the various constituent elements of the construction industry and can ultimately lead to certificate, diploma, or degree qualifications.

"We are constantly monitoring the industry's needs and tailoring the courses accordingly", says Seamus. "At present there is a huge demand for qualified, skilled, operatives who, in addition to the traditional skill element, also have a knowledge of IT and communications, along with diagnostic and analytical ability.

"The quality and base educational level of apprentices has risen dramatically in recent years. Something like 80% of our intake have good leaving cert results, while their commitment and eagerness to learn and embrace new concepts and ideas is very encouraging.

"This is patently obvious by the success rates of our students and from the feedback we get from employers. It is even more evident still on the national and international arena where our performance levels in the National Apprenticeship Competitions, and of course the International Skills Competitions, regularly results in gold, silver and bronze awards".

Nonetheless, rather than rest on its laurels and bask in the glory of these achievements, Seamus and his team are already looking to the future. New courses are currently being evaluated to suit the industry's constantly-changing needs. Nor does this development stop with the actual course content but rather also looks at the manner in which it is delivered. To that end flexibility is all-important, ideas now under consideration including weekend, evening and on-site courses. The overall objective is to be proactive in identifying the industry's future needs and in developing suitable courses to ensure that a ready supply of skilled, qualified operatives is available when it is required.

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Danfoss Heating Controls Means Saving Energy

The Danfoss Heating Division is something of a paradox in that it is not about energy consumption but rather energy savings and the wise, cost-effective, use of energy. The whole basis of the extensive product range is energy-saving technology and performance enhancement. It covers the entire spectrum of building services applications, from domestic through to commercial and industrial projects.

Continuous investment in research and design has resulted in one of the most advanced ranges of heating controls in the world. Many of the individual products are highly-innovative and reflect a whole new pioneering concept which recognises that energy savings which militate against comfort levels are never going to be accepted.

"It is essential", says Brian Maguire, Divisional Sales manager, "that we develop heating control products which can be tailored to suit different needs and applications. This is the only way maximum energy savings can be achieved while, at the same time, realising and maintaining the correct comfort levels. The two go hand in hand.



Robert Fitzpatrick, Internal Sales Representative, with David Holmes, Product Manager and Brian F Maguire, Divisional Sales Manager

"Equally important is that these products are made available at a reasonable cost. At Danfoss Ireland we endeavour to meet the requirements of the marketplace with products and systems which are affordable. It is not a question of being the cheapest but of providing the best value-for-money.

"Nor are we in the business of shifting boxes whereby the sale starts and ends once the product has been purchased. Danfoss Ireland offers a total service which includes full technical support at the point of product selection and system design, right through to an ultra-professional after-sales service programme.

"To that end all our sales and technical engineers are fully trained at the

purpose-built training facility at Danfoss A/S in Nordborg, Denmark, while a continuous programme of regular technical updates and in-house seminars ensures that this knowledge base is maintained at the highest level.

"It also helps that we are a listening organisation. We consult with all the professions involved in the construction sector and

take on board their concerns, anxieties and suggestions. Our participation in relevant public and trade exhibitions, and involvement with bodies such as the Irish Energy Centre, also provides a wealth of information. This consultative process very often results in products coming to the marketplace which the industry at large never knew it needed, but which it has been instrumental in developing.

"Danfoss A/S on a world scale — and Danfoss Ireland here on a local level — are very much an integral part of the industries we serve, rather than mere product and service providers to them. Therein lies the real strength of what we are about".

Contact: Brian F Maguire, Danfoss Ireland.
Tel: 01 - 626 8111.

email:
brian.maguire@danfoss.ie

Product Range Cross-Section

- ◆ Programmable Fan Coil Thermostats — **NEW**
- ◆ Programmable Heat/Cool Thermostats — **NEW**
- ◆ RA5-C&D Bi-Directional Thermostat Radiators
- ◆ M 18 Range of Programmers & Time Switches
- ◆ Motorised 2- and 3-port Valves
- ◆ Programmable Room Thermostats
- ◆ Radio-Controlled Thermostat Systems
- ◆ Weather Compensators
- ◆ Under-Floor Heating Systems

BTU GOLF NEWS



Brian Redmond, Ideal Standard Armitage Shanks with Brendan Bracken, Winner Class 1



Brian Redmond, Ideal Standard Armitage Shanks with Vincent Broderick, 2nd Class 1, and Brendan Keavney, BTU Captain

Table A — Outings for the Season 2001

Tuesday, 17 April — The Island Golf Club (matchplay qualifying)

Thursday, 17 May — The Castle Golf Club

Thursday, 21 June — Malahide Golf Club

Friday, 20 July — Delgany Golf Club (Captains)

24 - 26 August — Ballymascanlon Hotel Dundalk

Friday, 14 September — Powerscourt Golf Club (Presidents)

Friday, 12 October — The Royal Dublin Golf Club

Friday, 7 December — St Anne's Golf Club (Christmas Outing)

Table B — Sponsorship for Season 2001

Bob Daly, Valve Control Systems

Tim O'Flaherty, Liberty Air Technology Ltd

Brendan Kilgallon, Coolair Ltd

Michael Murphy, ABB Ltd

John Sampson, Danfoss Ireland

Brian Redmond, Armitage Shanks Ireland

Alan Hughes, Runtal Ltd

Con Stack, Killarney Plastics

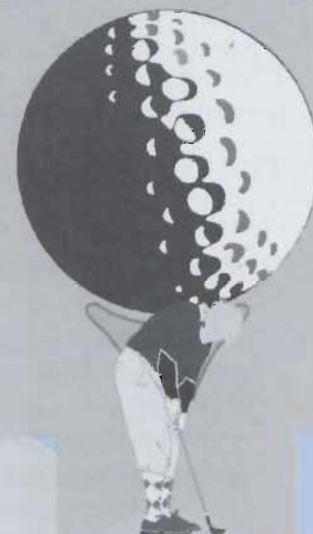
Bernard Costello, Eurofluid Handling Systems

Pat Byrne, York ACR

Contact: Gerry Tobin, Honorary Secretary, BTU.

Tel: 01 - 837 6076.

BTU Season Gets Underway



Island Golf Club – 17 April 2001

Winner: Mick Matthews (8), 42pts

CLASS 1

1st: B Bracken, 34pts; 2nd: V Broderick, 31pts;

3rd: G Fay, 31pts

CLASS 2

1st: M O'Doherty, 31pts; 2nd: G Carleton, 31pts;

3rd: G Phelan, 31pts

CLASS 3

1st: T Maher, 28pts; 2nd: B Daly, 28pts;

3rd: N Ryan, 27pts

Visitors

Ken Quinn, 29pts

Sponsor

Sponsor

B Molloy, 29pts

Ideal Standard *Armitage Shanks*

1st Nine: D Lynch; 2nd Nine: B Sweeney

Match Play

All matches to be played before 17 May. Winner to confirm result to Des Prendergast at

Tel: 01 - 286 8244; Fax: 01 - 286 1729.

J Hogan v T Maher

B Keavney v S Stenson

G Tobin v Brian Keavney

J Warren v D Daly

B Bracken v J Lavelle

V Broderick v S Kearney

J Hunter v J Duignan

M O'Doherty v S Jones

G Hutchinson v G Phelan

J Duggan v S Smith

G Fay v F Lynch

D Lynch v B Redmond

J White v L McEterick

B Costello v M Matthews

J Littlefield v B Daly

M Melligan v N Ryan

Next Outing – Castle Golf Club, 17 May. Time

Sheet: John White. Tel: 01 - 456 8777 (9am to

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